

STEPANOV, Dmitriy Vasil'yevich; SUSHKEVICH, V.I., redaktor; VORONIN, K.P.,  
tekhnicheskiy redaktor.

[Impulse amplifiers] Impul'snye usiliteli. Moskva, Gos. energ. izd-  
vo, 1954. 255 p. (MLBA 8:1)  
(Amplifiers, Electron-tube)

NOVOSARTOV, M.T.; SUSHKEVICH, Ye.V.

Design of a ferrite phase shifter.  
no.9:1552-1557 S '63.  
(Microwaves)

Radiotekh. i elektron. 8  
(MIRA 16:9)  
(Phase converters)

SUSHKIN, A. I.

23369 Usovershenstvovaniye Organizatsii Truda "Machiki. Tekstil. Proms-st",  
1949, No. 6, c. 19-20

SO: LETOPIS NO. 31, 1949

SUSHKIN, G.L.

First All-Union Conference on Statistical Radio Physics.  
Izv. vys. ucheb. zav. radiotekh. 2 no.1:121-127 Ja-F '59.  
(MIRA 12:5)

1. Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom  
gosudarstvennom universitete im. N.I. Lobachevskogo.  
(Radio--Congresses)

MASLOVSKIY, P.M.; OSIPOVA, V.A., redaktor; SUSHKIN, I.N., redaktor;  
EVENSON, I.M., tekhnicheskii redaktor.

[Study of heat processes in Martin furnaces on the basis of the  
theory of similitude] Izuchenie teplovoi raboty martenovskikh  
pechei na osnove teorii podobia. Moskva, Gos. nauchno-tekhn.  
izd-vo lit-ry po cherno i tsvetnoi metallurgii, 1954. 118 p.

(MLRA 7:12)

(Heat) (Open-hearth process) (Dimensional analysis)

STARK, Sergey Borisovich; IEL'YAVIN, N.Ya., redaktor; GUSHKIN, I.N.,  
redaktor; BEKKER, O.G., tekhnicheskii redaktor

[Fundamentals of hydraulics, and pumping and blowing machinery;  
collection of problems] Osnovy gidravliki, nasosy i vozdukhoduvnye  
mashiny; sbornik zadach. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry  
po chernoi i tsvetnoi metallurgii, 1954. 368 p. (MLRA 8:3)  
(Fluid mechanics)

NITSKEVICH, Yevgeniy Arkad'yevich; MELENT'YEV, L.A., prof.; retsenzent; ,  
ROSSIYEVSKIY, G.I., kand.tekhn.nauk; retsenzent; KABELYANSKIY,  
G.V., inzh., retsenzent; SUSHKIN, I.N., inzh., red.; MURZAKOV,  
V.V., kand.tekhn.nauk, red.; NEPOMNYASHCHIY, N.V., red.izd-va;  
ATTOPOVICH, M.K., tekhn.red.

[Full use of fuel in ferrous metallurgy] Ispol'zovanie topliva  
v chernoi metallurgii. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry  
po chernoi i tsvetnoi metallurgii, 1954. 622 p.

(MIRA 14:1)

(Metallurgical plants--Equipment and supplies)

(Fuel)

KARAVAYEV, Nikolay Mikhaylovich, professor; PIJ'SKIY, Iosif Yakovlevich;  
SHEPELEV, Ivan Georgiyevich; LAZAREV, N.N., redaktor; SUSHKIN, I.N.,  
redaktor; ATTOPOVICH, M.K., tekhnicheskiy redaktor.

[Machines and apparatus used in the production of coke] Mashiny i  
apparaty koksokhimicheskogo proizvodstva. Pod obshcheired. N.M.Ka-  
ravayeva. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po cherno i tsvet-  
noi metallurgii. Vol. 1. 1955. 299 p. (MIRA 9:6)

1.Chlen-korrespondent AN SSSR (for Karavayev).  
(Coke industry--Equipment and supplies)



SUSHKIN, I.N.  
GARYAYEV, Andrey L'vovich; SUSHKIN, I.N., redaktor; EVENSON, I.M.,  
tekhnicheskiy redaktor.

[Preparation and repair of metal structures in metallurgical  
plants] Izgotovlenie i remont metallokonstruktsii na metallurgi-  
cheskikh zavodakh. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po  
chernoy i tsvetnoy metallurgii, 1957. 379 p. (MLRA 10:6)  
(Metalwork)

24(8)

PHASE I BOOK EXPLOITATION

SOV/2987

Sushkin, Igor' Nikolayevich

Osnovy teplotekhniki; uchebnik dlya shkol i kursov masterov  
(Principles of Heat Engineering; Textbook for Schools and  
Courses for Foremen) Moscow, Metallurgizdat, 1958. 356 p.  
16,500 copies printed.

Ed. of Publishing House: M. R. Lanovskaya; Tech. Ed.: Ye. B.  
Vaynshteyn.

PURPOSE: This textbook is to be used in schools and training courses  
for foremen. It may also be used by workers studying to improve  
their skill.

COVERAGE: This book deals with the fundamentals of heat engineering,  
engineering thermodynamics, and the theory of heat transfer. The  
concept of specific heat, properties of steam, gas laws, cycles  
of heat engines, and basic heat-exchange processes are included.

~~Card 1/1~~

SEMENENKO, Nikolay Aleksandrovich, prof., doktor tekhn.nauk; SUSHKIN, I.N.,  
red.; DOBUZHINSKAYA, L.V., tekhn.red.

[New trends in the use of secondary power resources in heavy  
industry; combined production and power engineering connected  
with industrial flame processes] Novye puti ispol'zovaniya vto-  
richnykh energoresursov tiazhaloi promyshlennosti; energotekhn-  
ologicheskoe kombinirovanie v promyshlennoi ognetekhnike. Moskva,  
Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii,  
1960. 39 p. (MIRA 13:3)

1. Moskovskiy Energeticheskiy institut (for Semenenko).  
(Power engineering) (Waste heat)

KALASHNIKOV, N.V.; STOTSKIY, L.R.; GLINER, B.M. [deceased]; DOBRYNINA, N.P.; DUBROVSKAYA, Kh.A.; YEZDAKOVA, M.L.; LYUBIMOV, N.G.; PONOMAREVA, K.A.; REYKHTSAUM, P.B.; SMIRNOV, V.I.; SUSHKIN, I.N.; SHAKHMAYEVA, Ye.A., vedushchiy red.; POLOSINA, A.S., tekhn. red.

[Units of measurement and abbreviations of physical and technical values; manual for editors and writers] Edinitsy izmereniia i oboznacheniiia fiziko-tekhnicheskikh velichin; spravochnik dlia rabotnikov izdatel'stv i avtorov. Moskva, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1961. 254 p. (MIRA 14:9)

1. Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo neftyanoy i gorno-toplivnoy promyshlennosti (for Kalashnikov, Dobrynina, Smirnov). 2. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina, (for Stotskiy). 3. Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo Ministerstva promyshlennosti proizvod'stvennykh tovarov (for Dubrovskaya). 4. Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo literatury po chernoy i tsvetnoy metallurgii (for Yezdakova, Sushkin). 5. Gosgortekhzdat (for Lyubimov). 6. Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo mashinostroitel'noy literatury (for Ponomareva). 7. Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo khimicheskoy literatury (for Reykhtsaum).  
(Engineering--Nutation) (Units)

BAKHMACHEVSKIY, Boris Ivanovich; ZAKH, Rene-Yulian Gustavovich; LYZO,  
Georgiy Pavlovich; SUSHKIN, Igor' Nikolayevich; SHCHUKIN,  
Aleksey Aleksandrovich; OSIPOVA, T.V., red.izd-va;  
DOBUZHINSKAYA, L.V., tekhn. red.

[Heat engineering; course in general heat engineering]  
Teplotekhnika; kurs obshchei teplotekhniki. [By] B.I.Bakh-  
machevskii i dr. Moskva, Metallurgizdat, 1963. 605 p.  
(MIRA 17:2)

1ST AND 2ND QUARTS										3RD AND 4TH QUARTS									
PROCESSES AND PROPERTIES INDEX																			
<p><i>ca</i></p> <p>Thermal capacity of monatomic liquids. I. N. Godnev and I. V. Sushkin. <i>J. Exptl. Theoret. Phys. (U. S. S. R.)</i> 9, 1142-6 (1959).—Assuming that the av. fractions <math>x</math> and <math>1-x</math> of all molecules are in translatory and vibrational motion, resp., G. and B. derive the equation <math>C_v = \frac{1}{2}RT/\theta_{\text{vib}} +</math></p> <p><math>C_v(\theta/T)(1 - BT\theta) + [(RT + U_0)/RT][1/\theta RT + U_0 - U(\theta/T)/RT\theta]</math>, where <math>\theta = -U/RT</math>, and <math>C_v(\theta/T)</math> is the Einstein function. This equation is in satisfactory agreement with the decrease of <math>C_v</math> with <math>T</math> and with values of <math>C_v</math> over 6 Cal. near the m. p. and is further in good agreement with data of Eucken and Haack (<i>C. A.</i> 22, 4286) on the heat capacity of liquid argon. F. H. Raichmann</p>										<p><i>2</i></p>									
<p><i>Innovo Chem-Tech Inst.</i></p>																			
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																			
<p>120000 92</p>																			

TEST AND PROPERTIES INDEX									
2									
<p>ca</p> <p>The heat capacity of monatomic liquids. I. N. Godnev and I. V. Sushkin. <i>Trans. Inst. Chem. Tech. USSR</i> (U.S.S.R.) 1960, No. 3, 22-7. See C. A. 35, 13. W. R. Huen</p>									
<p>ASTM-A1A METALLURGICAL LITERATURE CLASSIFICATION</p>									

SUSHKIN, I. V.

"On the Transformation of the Eidinoff and Aston Determinant," i Teoret. Fiz., 11,  
No. 1, 1941. Chemico-Technological & State Pedagogical Inst., -1940-.



SUSKIN, I. V.

"Theory of Superfluidity of Fermi Systems"  
Vch. Zapiski Ivanovskogo Ped. Inst.,

The excitation spectrum of a Fermi system of interacting particles is studied by means of second quantization. A simplification is introduced by equating the mean value of numbers filling the Fermi sphere to one, and the number outside the Fermi sphere to zero. Introducing the obtained results to the case of superfluidity the author derives the temperature dependence for  $E \propto T^5$  on the magnetic field. (RZhFiz, No 2, 1965)

Sci. Sum. 492, 12 May 55

SOROKIN, V.S.; SUSHKIN, I.V.

Stability of equilibrium of a conducting liquid heated from below and  
situated in a magnetic field. Zhur. eksp. i teor. fiz. 38 no.2:612-620  
F '60. (MIRA 14:5)

1. Ivanovskiy gosudarstvennyy pedagogicheskiy institut.  
(Magnetohydrodynamics)

SUSHKIN, I.V.

Determining the Planck constant in practical work of a general physics  
class. Izv.vys.ucheb.zav.;fiz.no.2:172-173 '63. (MIRA 16:5)

1. Ivanovskiy pedagogicheskiy institut.  
(Quantum theory) (Physics—Study and teaching)

SUSHKIN, N. G.

USSR/Electronics  
Microscopes, Electron  
Electrical Equipment

Sep 48

"Selecting the Material for the Pole Shoes of an Electron Microscope," Sh. M. Rakhimov,  
N. G. Sushkin, 6 $\frac{1}{2}$  pp.

"Zhur Tekh Fiz" Vol XVIII, No 9

Treats under: (1) determination of focal length of magnetic lens, (2) measurement of  
magnetic field distribution along the axis of the lens, and (3) discussion of results  
and conclusions. Submitted 17 Jan 48.

PA 3249T18

SUSHKIN, N. G.

PA 53/49T95

Oct 48

USSR/Physics  
Photoelectrons  
Photography

"Disagreements With the 'Law of Relationships'  
caused by the Photographic Activity of Electrons,"  
N. G. Sushkin, L. A. Kovner, Moscow Power Eng Inst  
imeni V. M. Molotov, 22 pp

"Dok Ak Nauk SSSR" Vol LXII, No 5

Investigations show that disagreements with the "law  
of relationship" occurred in several types of film  
produced by NIKFI (Sci Res Cine-Photo Inst), in  
isochronic film (Factory No 2), microfilm (NIKFI),  
and other films. Further research is being conducted  
on the role of various factors in upsetting subject  
law. Submitted by Acad S. I. Vavilov, 16 Aug 48.

53/49T95

SUSHKIN, N. G.

Elektronnyi mikroskop. Moskva, Gostekhnizdat, 1949. 276 p. illus. (Fiziko-matematicheskaya biblioteka inzhenera)

Bibliography: p. (274)-276

Electron microscope \

DLC: QH211.S95

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

PA

*Industrial and scientific  
applications of Photography*

589

Small Electron Microscope. N. G. SUSUKIN, P. V. ZAITSEV and O. N. RYBAKOV. *Elektrichestvo*, 1949, No. 12, 6-9.—A new Russian simplified design, suitable for series production, is described. It is operated at 35-50 kV. and has a magnification of 1,000-15,000. The electron gun is at the bottom of the central column, the fluorescent screen at eye level and the photographic camera at the top. The gun is fully screened, e.h.v. being supplied by a screened cable. A condenser lens and a two-lens magnetic focus system are used. Details of the photographic arrangements, controls, vacuum system and stabilized supplies, etc., are given, as well as a cross-sectional drawing of the column.

778.31

*Elec. Eng. Abs.*

12/1/77

USSR/physics  
Electron Diffraction  
Electron Microscopy

May 49

"Alternate Diffraction of Flying Electrons,"  
I. Biberman, N. Sushkin, V. Fabrikant, Moscow  
Power Eng Inst Imeni V. M. Molotov, 2 pp

"Dok Ak Nauk SSSR" Vol LXVI, No 2

Experiments on diffraction of electrons are  
usually carried out in powerful beams. Experience  
has shown the diffraction picture is independent  
of the intensity of the electron beam. On this  
basis, an imaginary experiment is discussed in  
terms of quantum mechanics in which electrons are

52/49799

USSR/Physics (Contd)

May 49

diffracted one by one and wave properties are  
ascribed to each particle. At present there can  
hardly be any doubt as to the correctness of this  
assumption; however, importance of experiments on  
diffraction of particles is so great that there  
is some point in carrying out a real experiment  
on diffraction of single electrons. Describes  
such an experiment, using a modified electron  
microscope, type EM-100. Includes two photo-  
graphs. Submitted by Acad S. I. Vavilov,  
16 Mar 49.

52/49799



SUSHKIN, N. G.

Dec 49

USSR/Physics - Electron Scattering  
Electron Microscope

"Scattering of Electrons in Thin Layers," L. N. Biberman, Ye. M. Vtorov, I. A. Kovner, N. G. Sushkin, B. M. Yavorskiy, Moscow State University V. M. Kolotov, 4 pp

"Dokl Akad Nauk SSSR" Vol LXIX, No 4

Results of experiments using electron microscope EM-100 to measure angular distribution of electrons passed through thin films and scattered in the interval from  $3 \cdot 10^{-4}$  to  $3 \cdot 10^{-2}$  radian showed measurements in this interval are quite reliable. However, number of 60 KeV electrons scattered was much greater than number calculated for very small angles ( $3 \cdot 10^{-3}$  radian). Submitted by Acad S. I. Vavilov 6 Oct 49.

PA-155T64

USSR/Electronics - Photography

Jul/Aug 51

"Resolving Power of Photoemulsion for Electron Rays," N. G. Sushkin, Ye. N. Vetrov, Moscow Inst of Power Eng Imeni Molotov

"Iz Ak Nauk SSSR, Ser Fiz" Vol XV, No 4, pp 402-407

Russian-made electron microscopes provide medium magnification and further optical magnification of photographic plates requires good resolving power. Methods applied for measurements of resolving power of photoemulsion are those by

195T39

USSR/Electronics - Photography  
(Contd.)

Jul/Aug 51

B. Borries (Zs fuer Physik, 122, 1944 and 119, 1942) and by M. Ardenne (Elektronenbermerkroscopie, Berlin, 1940). Results tabulated.

195T39

SUSHKIN, N. G.

PA 195T39

SUSHKIN, N. G.

USSR/Electronics - Photography

Jul/Aug 51

"Electronic Sensitometry," N. G. Sushkin, I. A. Kovner. Ye. N. Vtorov, Moscow Inst of Power Eng imeni Molotov

"Iz Ak Nauk SSSR, Ser Fiz" Vol XV, No 4, pp 395-402

Subject deals with quant photographic properties of materials. Investigated 12 types of Russian-made plates; and plotted curves of emulsion sensitivity vs charge density. Tabulates electronic parameters of plates. Authors are grateful to V. A. Fabricant and K. S. Bogomolov for advice.

195T38

PA 195T38

SUSHKIN, N. G.

Electron Microscope. (The Engineer's Physicomathematical Library.) Glavpoligrafizdat, Main Polygraphic Publishing House, 276 pp, 1952.

*Sushkin, N.G.*

USSR/Optics - Photography

K-11

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 13247

Author : Sushkin, N.G., Fomina, I.A.

Inst : Moscow Power Institute, USSR

Title : Optimum Conditions for the Development of Photographic Plates, Exposed by Medium Energy Electrons.

Orig Pub : Zavod. laboratoriya, 1956, 22, No 8, 961-964

Abstract : An investigation was made of the kinetics of the development of electronographic plate E-III, exposed in an electron microscope-sensitometer with electrons of energies 32, 60, and 80 kev, and developed in seven different developers. From the resultant families of density curves D at various conditions of development, and families of curves of the kinetics of the development for various values of electron energy and for various values of the charge

Card 1/2

USSR/Optics - Photography

K-11

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 13247

density, it follows that the maximum of D at 32 kev is given by the "Final'" brand developer. The NIKFI X-ray developer gives a somewhat lower value of D with considerably less fog. At energies of 60 and 80 kev, the X-ray developer is much superior, with respect to the resultant value of D, than all other developers. For developer brands "Final'" and "Atomal'" one observes an exceedingly slow increase in D with time of development for all values of electron energy. Special experiments have shown that this feature is due to the specific nature of the photographic action of the electron, and is not observed when light sensitograms are developed. The optimum development mode for the plate E-III in X-ray developer NIKFI is nine minutes at  $18 \pm 0.5^\circ$ .

Card 2/2

*Stashkov*  
VUL'FSON, K.S., prof.; GUREVICH, M.M., prof.; MESHKOV, V.V., prof.; NILENDER, R.A., prof. YUROV, S.G., kand. tekhn. nauk; SOKOLOV, M.V., prof.; BIBERMAN, L.M., kand. tekhn. nauk; BUTAYEVA, F.A., kand. tekhn. nauk; IVANOVA, N.S., kand. tekhn. nauk; SUSHKIN, N.G., kand. tekhn. nauk.

Valentin Aleksandrovich Fabrikant; on his 50th birthday. Svetotekhnika 3 no.12:24-25 D '57. (MIRA 11:1)  
(Fabrikant, Valentin Aleksandrovich, 1907-)

AUTHORS:

Sushkin, N. G., Kushnir, Yu. M.

57-28-4.35/39

TITLE:

On the Action of Electrons Upon Multilayer Photographic  
Films (O deystvii elektronov na mnogosloynnye fotoplenki)

PERIODICAL:

Zhurnal Tekhnicheskoy Fiziki, 1958, Vol. 28, Nr 4,  
pp. 908-909 (USSR)

ABSTRACT:

For the determination of the behavior of a multilayer photographic film on irradiation by electrons the authors performed special experiments, the results of which are given in this paper. The experiments were performed in two electron-microscopes - an electron-microscope 3 M-100 (References 1, 2) and a reflection-electron-microscope of special construction. It is shown that the exposure of the multilayer colorphotographic film to electrons of different velocities causes a different coloring of the film. It is further shown that the color shade depends on the velocity of the electrons. With a modification of the velocity of electrons mainly the shade of the film changes. On a modification of the time of exposure by the beam and of the intensity mainly the saturation of the color changes.

Card 1/2



GUTKIN, A.M., kand.fiz.-matem.nauk; SUSHKIN, N.G., kand.tekhn.nauk;  
FADEYEVA, V.S., kand.tekhn.nauk; SHCHERBAKOVA, Ye.A., assistant

Separation of fine fractions with the help of an electron  
microscope. Sbor. trud. VNIINSM no.2:130-161 '60. (MIRA 15:1)  
(Binding materials)  
(Electron microscope)

ACCESSION NR: AP4004154

s/0294/63/001/002/0313/0315

AUTHOR: Sushkin, N. G.

TITLE: Czochralski method of growing refractory metal single crystals with electron beam heating

SOURCE: Teplofizika vy\*sokikh temperatur, v.1, no. 2, 1963, 313-315

TOPIC TAGS: single crystal, single crystal growth, Czochralski method, electron beam heating, refractory metal single crystal, metal single crystal, metal crystal growing, electron beam

ABSTRACT: Since ordinary crystal growing by zone purification with electronic heating is very labor consuming and the size of the single crystals is quite limited, the application of the Czochralski method of drawing single crystals from a melt of a refractory material is of great practical interest. If the Czochralski method is combined with electronic rather than arc heating (the pool of

Card 1/2

ACCESSION NR: AP4004154

molten metal is produced by an electron beam), the feasible crystal diameter is increased and in principle has no limit. Apparatus used to grow single crystals of niobium and molybdenum is described, with a drawing rate 4 mm per minute, anode voltage 12 kV, anode current 1.5, the cathode power 15 V x 60 A. Orig. art. has: 2 figures.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power-Engineering Institute)

SUBMITTED: 03Jul63 /

DATE ACQ: 26Dec63

ENCL: 01

SUB CODE: PH, ML

NO REF SOV: 000

OTHER: 000

Card 2/3 2

L 58997-65 EWT(1)/EPA(w)-2/EWA(m)-2 P1-4/P1-6 IJF(5) AT

ACCESSION NR: AP5016008

LR/0058/65/000/005/H083/H083

SOURCE: Ref. zh. Fizika, Abs. 5Zh554

AUTHORS: Sushkin, N. G.; Pereshogin, M. I.

TITLE: Experimental investigation of the trajectory of electrons in a magnetron gun

21 38 B

CITED SOURCE: Elektrotermiya. Nauchno-tekhn. sb., vyp. 37, 1964, 25-26

TOPIC TAGS: magnetron gun, electron trajectory, electron beam, electron optical bench, electron probe

TRANSLATION: The authors describe an installation (electron-optical bench) for the investigation of the structure of an electron beam and for finding directly the trajectory of the electrons in a magnetron gun. The installation consists of the gun proper and of an observe (or check) screen. The observe screen is movable along the axis of the gun. It is possible to move the screen in the direction of the electron beam. The electron beam is observed on the screen. The electron beam is observed on the screen. The electron beam is observed on the screen.

Card 1/2

ACCESSION NR: AP5016008

element produced by the magnetron gun. The coordinates of this element of the beam can be readily determined with the aid of the moving fluorescent screen. The apparatus makes it possible to carry out investigations at accelerating voltages of 7. The trajectories of the electron beam are presented for two modes of the magnetron gun. A. Kabanov.

"APPROVED FOR RELEASE: 03/14/2001" CIA-RDP86-00513R001654010007-7

SUBJECT: NP, EM

ENCL: 00

Card 2/2

L 45522-66 EWT(1) IJP(c) AT/JM

ACC NR: AR6013706

SOURCE CODE: UR/0058/65/000/010/H066/H066

AUTHOR: Sushkin, N. G.; Alferova, Ye. V.; Bash, Yu. M.; Perezhogin, M. I.

TITLE: Graphic construction of the trajectory of electrons in a magnetron gun

SOURCE: Ref. zh. Fizika, Abs. 10Zh444

REF. SOURCE: Tr. Vses. n.-i. in-ta elektroterm. oborud., vyp. 1, 1965, 50-65

TOPIC TAGS: magnetron, electron motion, electron optics, electron gun

ABSTRACT: The possibility is considered of using a magnetic field to focus the electrons in powerful (up to 100 kW) magnetron guns for electronic heating. In this case the anode voltage can be reduced to 10 -- 15 kV; the requirements on the accuracy of the installation of the anode and the cathode are also less stringent. For a consistent design of the optical system, a graphic method has been developed for constructing the electron trajectories (ET) in superimposed homogeneous and inhomogeneous electric and magnetic fields with axial symmetry. The ET are constructed in the meridional plane by the radius-of-curvature method,  $R = f(r, z)$ , and the plane itself is rotated together with the electron at an angular velocity  $\dot{\varphi} = f(t)$ . An advantage

Card 1/2

L 45522-66

ACC NR: AR6013706

of the method is the possibility of calculating the ET not only in the regions near the axis, but also at arbitrary distances away from the axis. The calculated ET is in good agreement with the electron beam observed in a model. A shortcoming of the method is that the calculations are complicated and unwieldy. N. Mayer. [Translation of abstract]

SUB CODE: 20, 09

Card 2/2

*egh*

SUSHKIN, V. (Tula).

Municipal inspections of volunteer fire brigades and fire-technical  
committees. Pozh. delo 4 no.6:9 Je '58. (MIRA 11:5)  
(Tula--Factories--Fires and fire prevention)

LEONOV, P.V., inzh.; SUSHKIN, V.A., inzh.

Determination of the capacity of the traction engine of a self-propelled car for extraction galleries with complex hypsometry. Nauch. trudy Tul. gor. inst. no.4:165-172 '61. (MIRA 16:8)

(Moscow Basin--Mine railroads--Cars)



POLEZHAYEV, P.P., dotsent; STREL'NIKOV, L.P., dotsent, kand. tekhn. nauk;  
SUSHKIN, V.A., inzh.

New system of magnetizing the driving wheels of mine locomotives.  
Nauch. trudy Tul. gor. inst. no.4:223-231 '61. (MIRA 16:8)

(Mine railroads)

COMMON ELEMENTS		1ST AND 2ND SIDES		PROCESSES AND PROPERTIES INDEX		1ST AND 2ND SIDES	
SUSHKIN, V. G.						16	
<p><b>Small-Dimension Electron Microscope. (In Russian.)</b>  W. G. Sushkin, P. V. Zaitsev, and O. N. Rybakov.  <i>Elektrichestvo</i> (Electricity), Dec. 1949, p. 6-9.  Describes, diagrams, and illustrates the above in which the microscope is attached to a bench resembling an ordinary writing desk. Operating characteristics are given.</p>							
<p>ASMA-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>							
<p>COMMON ELEMENTS</p>							
<p>COMMON ELEMENTS</p>							

BOGORODSKIY, Ye.S.; SUSHKIN, V.S.

Mechanization of assembling operations at the "Tizpribor" Plant.  
Priborostroenie no.2:22-23 F '62. (MIRA 15:2)  
(Instrument manufacture)

GOGOL', L.G.; BELIKOVA, V.P.; SUSHKINA, A.G.; RAYKINA, V.G.; PUGACHEVA, Z.F.

Characteristics of a typhoid fever outbreak at an industrial enterprise. Trudy TSIU 68:35-37 '64. (MIRA 18:5)

SUSHKINA, A.P.

33973 SUSHKINA, A.P. Pitaniye  
I Rost Nyekotorykh Bryukhonogikh  
Mollyuskov Trudy Vsesoyuz  
Gidrobiol O-Va, T. I, 1949 S. 118-31  
-Bi, bliogr: 7 Nazv

SO: Letopis' Zhurnal'nykh Statey, Vol. 42, Moskva, 1949

SUSHKINA, A.P.

Vertical distribution of *Calanus finmarchicus* (Gunn.) and its fatness. Dokl. AN SSSR 141 no.5:1208-1210 D '61. (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii. Predstavleno akademikom Ye.N. Pavlovskim.

(Atlantic Ocean—Copepoda)

SUSHKINA, A.P.

Diurnal rhythm of feeding and vertical migrations of *Calanus finmarchicus* (Gunn.) as related to its fatness. Vop. ekol. 5:211-212  
'62. (MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo  
rybnogo khozyaystva i okeanografii, Moskva.  
(Calanus)

SUSHKINA, A.P.

Rate of fat consumption at various temperatures and the life  
cycle of *Calanus finmarchicus* (Gunn.) and *C. Glacialis* Jaschn.  
Zool.zhur. 41 no.7:1004-1012 J1 '62. (MIRA 15:11)

1. U.S.S.R. Marine Fishery and Oceanography Research Institute,  
Moscow.

(*Calanus*)



SUSHKINA, A.P.

Vertical migration and diurnal rhythm of the feeding of *Calanus finmarchicus* (Gunn.) as related to its age and fatness. TRUDY  
VNIRO 46:235-253 '62. (MIRA 15:10)  
(Calanidae)

SUSHKINA, A.P.

Plankton organisms as indicators of currents in the waters of  
the Faeroe-Iceland area and adjacent regions. TRUDY VNIRO 46:267-  
287 '62. (MIRA 15:10)

(Arctic regions—Marine biology)

(Arctic regions—Ocean currents)

SUSHKINA, L. M., VERETA, L. A.

"Transmission of tickborne encephalitis in the natural foci of the Khabarovsk region." p. 61

Desyatoye Soveshchaniye po parazitologicheskim problemam i Prirodnouchagovym boleznyam. 22-29 Okt'yabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 254pp.

VERETA, L.A.; SUSHKINA, L.M.

Some results of a study on the infectivity of ixodid ticks by the encephalitis virus in the southern areas of Khabarovsk Territory. Vop.virsu. 5 no.3:292-297 My-Je '60. (MIRA 13:9)

1. Khabarovskiy nauchno-issledovatel'skiy institut epidemiologii i gigiyeny.

(Khabarovsk Territory--encephalitis)

AL'SHITS, I.Ya., kand.tekhn.nauk; SUSHKINA, L.N., inzh.

Investigating disulfide of molybdenum as a lubricant. [Trudy]  
TSNIITMASH no.90:124-145 '58. (MIRA 11:10)  
(Molybdenum compounds--Testing)

SLUSHKIWA, L. D.

PHASE I BOOK EXPLOITATION 507/5055

Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh. 3d, 1958.

gidrodinamicheskaya teoriya smazki. Oproy skol'zheniya. Smazka i smazochnyye materialy (Hydrodynamic Theory of Lubrication, Slip Bearings, Lubrication and Lubricant Materials) Moscow, Izd-vo AN SSSR, 422 p. 3221. 3221. 3221. 3,800 copies printed. (Series: 16; Trudy, v. 3)

Sponsoring Agency: Akademiya nauk SSSR, Institut mashinovedeniya. Respon. Eds for the Section "Hydrodynamic Theory of Lubrication and Slip Bearings": Ye. M. Gut'yar, Professor, Doctor of Technical Sciences, and A. K. D'yachkov, Professor, Doctor of Technical Sciences; Resp. Ed. for the Section, "Lubrication and Lubricant Materials": G. V. Vinogradov, Professor, Doctor of Chemical Sciences; Ed. of Publishing House: M. Ya. Kabanov; Tech. Ed.: O. M. Gus'kova.

PURPOSE: This collection of articles is intended for practicing engineers and research scientists.

COVERAGE: The collection, published by the Institut mashinovedeniya AN SSSR (Institute of Science of Machines Academy of Sciences USSR) contains papers presented at the 11th Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh (Third All-Union Conference on Friction and Wear in Machines) which was held April 9-15, 1958. Friction, lubrication and hydrodynamic theory (Cont.)

Korovin, M. V. On Unsteady Motions of the Journal in a Bearing ("Treniye i iznos v mashinakh" T. 14, Izd-vo AN SSSR, 1956)

## II. LUBRICATION AND LUBRICANT MATERIALS

### Lubricant Materials and Wear

Vinogradov, G. V. Some New Methods of Producing and Investigating Lubricant Materials 165

Al'shits, I. Ya., Ye. M. Gut'yar, L. M. Sankhovich, and G. M. Subbotin. Experiment Using Disulphide of Molybdenum as a Lubricant Material 172

Barbored'ko, M. D., M. T. Pavlovskaya, and V. V. Arkharova. Effect of the Composition and the Character of Gaseous Media on the Wear-Resistant Properties of Petroleum Lubricating Oils 177

Vintzel, S. V. Contact Effect in Wear as a Factor in the Oxidation of the Oil in Engines 187

Vinogradov, G. V., V. V. Arkharova, M. T. Pavlovskaya, and M. D. Barbored'ko. Wear-Resistant and Antifriction Properties of Salt Fusions 191

Vishnyakov, V. A., and V. G. Lebedev. Abrasive Wear of Roller Bearings in the Presence of a Lubricant Material 198

Klimov, K. I., and G. I. Kichkin. Critical Temperatures of an Oil Film in Sliding Contact of Steel Surfaces, and the Dispersive Capacity of the Oil 201

Lazovskaya, O. V. Methods for Determining the Critical Temperatures of an Oil Film in the Case of Friction of Steel Against Antifriction Alloys 212

Korotkov, O. Ya. Wear-Resistant Reactions of Sulfur-organic Compounds as Additives to Lubricant Oils 218

PHASE I BOOK EXPLOITATION

SOV/5053

Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh. 3d, 1958.

Iznos i iznosostoykost'. Antifrictionnyye materialy (Wear and Wear Resistance. Antifriction Materials) Moscow, Izd-vo AN SSSR, 1960. 273 p. Errata slip inserted. 3,500 copies printed. (Series: Its: Trudy, v. 1)

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya. Resp. Ed.: M. M. Khrushchov, Professor; Eds. of Publishing House: M. Ya. Klebanov, and S. L. Orpik; Tech. Ed.: T. V. Polyakova.

PURPOSE: This collection of articles is intended for practicing engineers and research scientists.

COVERPAGE: The collection, published by the Institut mashinovedeniya, AN SSSR (Institute of Science of Machines, Academy of Sciences USSR) contains papers presented at the III Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh (Third All-Union Conference on Friction and Wear in Machines) which was held April 9-15, 1958. Problems discussed were in 5 main areas: 1) Hydrodynamic Theory of Lubrication and Friction Bearings (Chairman: Ye. M. Gut'yar, Doctor of Technical Sciences, and A. K. D'yachkov, Doctor of Technical Sciences); 2) Lubrication and Lubricant Materials (Chairman: O. V. Vinogradov, Doctor of Chemical Sciences); 3) Dry and Boundary Friction (Chairman: B. V. Derjagin, Corresponding Member of the Academy of Sciences USSR, and I. V. Kragel'skiy, Doctor of Technical Sciences); 4) Wear and Wear Resistance (Chairman: M. M. Khrushchov, Doctor of Technical Sciences); and 5) Friction and Antifriction Materials (Chairman: I. V. Kragel'skiy, Doctor of Technical Sciences, and M. M. Khrushchov, Doctor of Technical Sciences). Chairman of the general assembly (on the first and last day of the conference) was Academician A. A. Blagonravov. L. Yu. Fuzhanskii, Candidate of Technical Sciences, was scientific secretary. The transactions of the conference were published in 3 volumes, of which the present volume is the first. This volume contains articles concerning the wear and wear resistance of antifriction materials. Among the topics covered are: modern developments in the theory and experimental science of wear resistance of materials; specific data on the wear resistance of various combinations of materials, methods for increasing the wear resistance of certain materials, the effects of friction and wear on the structure of materials, the mechanism of the seizing of metals, the effect of various types of lubricating materials on seizing, abrasive wear of a wide variety of materials and components under many different conditions; modern developments in antifriction materials, and the effects of finish machining on wear resistance. Many personal observations are mentioned in the text. References accompany most

ANTIFRICTION MATERIALS

Al'shits, I. Ya., and L. M. Sushkina. Testing of Antifriction Materials and Platings	240
Zil'berg, Yu. Ya. Results of Widespread Use of an Aluminum Alloy in the Bearings of Diesel Tractors	246
Krasnikhenko, L. V. New High-Antifriction Materials Obtained by Electroplating with a Metal Spray Gun	251
Kuznetsov, A. D. On the Establishment of a Relationship Between the Physical Properties of Antifriction Metal Alloys and Their Running-in	257
Polyakov, A. A. Investigation of the Antifriction Properties of Thromium Plated on a Rolled Surface	263
Reports Presented at the Conference, But Printed in Other Publications	270

Card 10/13

6

25529

S/123/61/000/011/004/034  
A004/A10115.6000

\* AUTHORS: Al'shits, I. Ya.; Sushkina, L. N.

TITLE: New antifriction materials and coatings

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 11, 1961, 22, abstract  
11A175 (V sb. "Povysheniye iznosostoykosti i sroka sluzhby mashin.  
v. 2". Kiyev, AN UkrSSR, 1960, 18-27)

TEXT: The authors present the results of investigating the properties of antifriction materials: rubber, materials on the base of graphite, fluoroplastics, polyamides, pressed wood pulp, cord fibers, cotton fibers and  $\Delta\Delta$  (DTs) plastics. They determined the resistance to wear and coefficient of friction  $\mu$  of five rubber grades of 86-54 shore hardness during boundary lubrication by clean water and water with abrasives. The counterbody rollers were made of 2 13 (2Kh13) grade steel, sliding speed  $v = 0.4$  m/sec,  $p = 1.5$  kg/cm<sup>2</sup>, test duration = 24,000 revolutions. The wear magnitude of the counterbody was insignificant, while the rubber wear was 17-155  $\mu$ . An addition of 10% abrasive to the water increased the counterbody wear by 100-300 times and reduced the rubber wear. The friction coefficient  $\mu$  of the rubber is lower when operating with an abrasive than with cle

Card 1/3



25529

S/123/61/000/011/004/034  
A004/A101

New antifriction materials and coatings

clean water lubrication. The test with rubber bearings proved that at  $p = 70 \text{ kg/cm}^2$ ,  $\mu = 0.002-0.008$ . A reduction in the water consumption to  $0.125 \text{ liter} \cdot \text{hour/cm}^2$  at  $p = 20 \text{ kg/cm}^2$  and  $v = 3.45 \text{ m/sec}$  does not affect the operation of the bearings. Rubber bearings can resist under hydrodynamic lubrication conditions a pressure of  $p = 100-200 \text{ kg/cm}^2$ . Under boundary lubrication conditions rubber has inferior characteristics, both of wear and coefficient of friction, than plastics. The load capacity of the investigated rubber grades does not exceed  $15 \text{ kg/cm}^2$ . The testing of graphite impregnated with 5H (BN) babbitt and lead during friction in a couple with rollers or shafts made of 45 grade steel of a hardness of 48-52  $R_o$  showed the resistance to wear ( $\mu = 0.16-0.23$ ) approximately twice as high as that of non-impregnated graphite. When graphite impregnated with metal is water-lubricated, its wear increases by a factor of 20,  $\mu = 0.06-0.09$ . Lubrication with oil results in  $\mu = 0.009-0.044$ . Of the plastics the most durable one concerning the effect of aggressive media is fluoroplastic 4 with an operating temperature of  $250^\circ$ , a water absorption of 0 and a hardness of  $3-4 \text{ kg/mm}^2$ . The best polyamide resins for bearings are the grades no. 54 and 68. Bearings from no. 54 resins lubricated with water or oil at a speed of  $4 \text{ m/sec}$  operated under a specific pressure of  $300 \text{ kg/cm}^2$  and higher. Bearing bushes coated with a powdered Al and Fe mixture (Al- 30%, the rest being Fe) and Cu and

Card 2/3

25529

New antifriction materials and coatings

S/123/61/000/011/004/034  
A004/A101

Fe mixture (Cu - 40%, the rest being Fe) had a load capacity  $p = 70-100 \text{ kg/cm}^2$  and  $v = 1.1 \text{ m/sec}$ . Bearing bushes coated with a mixture of phenol formaldehyde resin and 10% graphite operated satisfactorily on the average up to a load of  $120 \text{ kg/cm}^2$  when lubricated with water and  $v = 1.1 \text{ m/sec}$ ; when lubricated with oil the load increased to  $150 \text{ kg/cm}^2$ . At  $v = 1.1 \text{ m/sec}$  and lubrication with liquid oil the load capacity of bearing bushes from wood pulp amounts to  $65-70 \text{ kg/cm}^2$ . When the speed is increased to  $v = 4 \text{ m/sec}$  the load limit is reduced to  $45-50 \text{ kg/cm}^2$ . The permissible load with water lubrication amounts to  $70-100 \text{ kg/cm}^2$  at  $v = 1.1 \text{ m/sec}$ . Cord fiber is a plastic with a filler from the wastes of car tire manufacture, i. e., the threads of cord fabric additionally cleaned from rubber. Cotton fiber is made from emulsion resol resin and degreased cotton combinations. The utilization of mineral oil as lubricant deteriorates the operation of all plastics. The limit load for plastics at  $v = 1 \text{ m/sec}$  in which the fabric is made on the base of wood cellulose does not exceed  $40 \text{ kg/cm}^2$ , for cord fiber not more than  $20 \text{ kg/cm}^2$ , and only textolite operates at loads of up to  $100 \text{ kg/cm}^2$ . The load capacity of plastics decreases with increased speed if lubrication is effected with oil. Correspondingly also  $\mu$  increases considerably when working with oil lubrication (0.03-0.1) in comparison with water lubrication (0.002-0.005).

G. Mekhed

[Abstracter's note: Complete translation]

Card 3/3

S/122/60/000/003/001/015  
A161/A130

AUTHORS: Al'shits, I.Ya., Candidate of Technical Sciences; Antoshin, Ye.V.;  
Sushkina, L.N.; Eds'l'son, A.M.; - Engineers

TITLE: Pseudoballoys as replacement for bronze and babbitt

PERIODICAL: Vestnik mashinostroyeniya, no. 3, 1960, 3 - 6

TEXT: Information on Soviet pseudoalloys used lately for bearing linings and applied by spraying is presented. It is stated that the Soviet pseudoalloy compositions are close to compositions used in foreign practice for various machine bearings. The economic importance of these replacements for nonferrous metals is stressed. VNIITAVTOBEN jointly with TsNIIIMASH and VPTI tyazhlogo mashinostroyeniya (VPTI of Heavy-Duty Machinery) have carried out comparative tests of pseudoalloys with tin bronze, tin-free bronze, and B 83 (B83) babbitt. The test data have been used for an industrial standard (normal) for antifriction coatings issued by VNIITAVTOBEN. The compositions of pseudoalloys on steel and copper base used in tests are given (Table 1):

Card 1/3

Pseudoalloys as replacement for bronze and babbit

S/122/60/000/003/001/015  
A161/A130

Major element content in weight, %

Aluminum-steel AZh-50 (AZh-50)  
Copper-steel MC-75 (MZh-75)  
Brass-steel LC-75 (LZh-75)  
Steel 100 (Zh100)  
Copper-steel MC-50 (MZh-50)  
Copper-lead MC-25 (MS-25)  
Copper-tin-lead M75PC 30 (M75PC30)

Al	Fe	Cu	Zn	Pb	Sn	Sb
48-50	50-52	-	-	-	-	-
-	70-75	25-30	-	-	-	-
-	70-75	17-20	8-10	-	-	-
-	100	-	-	-	-	-
-	48-50	50-52	-	-	-	-
-	-	70-75	-	25-30	-	-
-	-	90-91	-	6-7	2-3	1

The linings were applied with a three-wire metal spraying MFG-1 (MFG-1) head of VNIIAVTOGEN design and a three-phase TM-2 (TM-2) spraying apparatus of VPTI of Heavy Duty Machinery; an LTC (LTC) test machine of TsNIIIMASH was used for tests for running-in and load capacity. The friction factor of pseudoalloys was approximately the same as of bronze (except of Zh100 steel); Zh100 steel had the lowest load capacity at sliding velocity  $v = 1 - 4$  m/sec ( $45-75$  kg/cm<sup>2</sup>), and the heat-treated copper-lead "MS25" had the highest ( $200-220$  kg/cm<sup>2</sup>). The best of steel-containing compositions in respect to antiscoring properties was AZh-50 (50% Fe +

Card 2/3

Pseudoalloys as replacement for bronze and babbitt

S/122/60/000/003/001/015  
A161/A130

+ 50% Al). These linings did not jam on steel trunnion and had a brite run-in surface after test. The conclusion was made that the pseudoalloys obviously can replace scarce bronze and babbitt. This conclusion was confirmed by the results of long-time tests of metal-sprayed bearings at the Moskovskiy shinnyy zavod (Moscow Tire Plant), Podol'skiy mekhanicheskiy zavod (Podol'sk Machine Plant), Rostovskiy zavod sel'skokhozyaystvennykh mashin (Rostov Agricultural Machinery Plant) and other industry plants. Bearing bushings lined with MZh-75 were still good for further use after 18 months in hydraulic 300-atm pumps, compared with a life of bronze bearings of only 2.5 months. There are 6 figures, 2 tables and 3 Soviet-bloc references.

Card 3/3

15

CHANGES IN SOIL BIOCHEMICAL PROCESSES UNDER THE INFLUENCE OF CLOVER CULTURE. N. N. SUSHIKINA. *Bull. acad. sci. U. R. S. S., Classe sci. math. nat.* 1931, No. 9, 1219-22 (in English 1252-3).--In chernozem soils of Dnieper low lands introduction of clover culture accelerates microbiological activity and increases intensity of the biochem. processes, though these effects become less apparent with depth. Close interdependence is observed between growth of plants and microbiological activity of the soil. J. R.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
COMMON ELEMENTS										COMMON VARIABLES									
<p>Microflora of soil from the delta of the Lena. J. N. Shtaukina. <i>Trans. Dokuchaev Soil Inst.</i> 6, 191-6(1932).—In the profile investigated bacterial activity was very slight. Nitrifying, cellulose-decomposing and aerobic putrefying bacteria are absent.</p> <p>Microbiol. life is concd. in A horizon (2-5 cm.). Protein decompn. is caused by molds or anaerobic putrefying bacteria.</p>										<p>15</p>									
<p>ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>										<p>FROM SOURCE</p>									

1ST AND 2ND ORDERS										PROCESSES AND PROPERTIES INDEX										3RD AND 4TH ORDERS									
<p>bc</p>										<p>Nitrification of forest soils and its dependence on the character of the plantation, felling, and burning of the felled timber. N. I. BAKHOMOVA (Bull. Acad. Sci. U.S.S.R. 1953, 111-114).—The soils of forests of <i>Pinus calligonum</i> (I) and <i>Pinus radiata</i> (II) show no nitrification, which is, however, vigorous in those of <i>Pinus fenzlana</i> (III) forests. The effect of felling on the intensity of the nitrification is nil with (I), slight with (III), and sometimes markedly stimulating with (II). Moderate burning of the felled timber always stimulates nitrification, in some cases within 3 days; this effect has been found to persist for 5 years. Mixing of the mineral soil with the top soil also favours nitrification.</p>										<p>13 III 1</p>									
<p>ASSEMBLY METEOROLOGICAL LITERATURE CLASSIFICATION</p>										<p>6-17-1953</p>																			
<p>1953 MAY 10</p>										<p>1953 MAY 10</p>																			



1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
<p><i>ea</i></p>										<p><i>15</i></p>									
<p><b>Influence of irrigation on the soil microflora. N. N. Sushkina. Trans. Irrigation Comm., Acad. Sci. U. S. S. R. 1, 87-94(1965). Saline soils on irrigation can support a microflora of the kind required for agricultural plants. The application of <math>\text{CaCO}_3 + (\text{NH}_4)_2\text{SO}_4</math> to irrigated land gave rise to intense nitrification. B. C. A.</b></p>																			
ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION										E30M 50M 17V									
E30M 17V 1821100										E30M 50M 17V									
E30M 17V 1821100										E30M 50M 17V									

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
SUBJECTS AND PROPERTIES INDEX										SUBJECTS AND PROPERTIES INDEX									
<p>15</p> <p>Nitrification in forest soils by means of planting, felling and clearing by fire. N. N. Sushkina. <i>Bull. acad. sci. U. R. S. S., Classe sci. math. nat.</i>, 1933, No. 1, 111-60.</p> <p>Soils of forests of the <i>Pinetum callunosum</i> and <i>Picetum oxalidosum</i> types are not capable of nitrification. On the contrary, soils of forests of <i>Picetum fontinale</i> vigorously nitrify the N of the litter. Felling causes no intense nitrification in forests of the <i>Pinetum callunosum</i> type, and has only a negligible effect in forests of the <i>Picetum fontinale</i> type. In forests of <i>Picetum oxalidosum</i> type, nitrification due to felling occurs only in favorable cases. Fire always has a stimulating effect upon the nitrification processes in forest soils.</p> <p>W. P. Ericks</p>										<p>15</p>									
<p>ASB-15A METALLURGICAL LITERATURE CLASSIFICATION</p>										<p>ASB-15A METALLURGICAL LITERATURE CLASSIFICATION</p>									

1ST AND 2ND COLUMNS		PROCESSES AND PROPERTIES INDEX	3RD AND 4TH COLUMNS
<p>BC</p>		<p>B-IV-1</p>	
<p>Changes in soil microflora during the desolodization of carbonate solonchiks. N. N. BOURKINA (Trans. Dokuchaev Soil Inst., 1984, 9, 118-124).--The development of microflora on SO<sub>4</sub> salt decreases with the solodization of carbonate solonchiks, and occurs in solodized soils. Nitrification in upper horizon decreases with solodization but increases in the 10-30 cm. horizon. A. II.</p>			
<p>ASB-11A METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>15000 15100 15200 15300 15400 15500 15600 15700 15800 15900 16000 16100 16200 16300 16400 16500 16600 16700 16800 16900 17000 17100 17200 17300 17400 17500 17600 17700 17800 17900 18000 18100 18200 18300 18400 18500 18600 18700 18800 18900 19000 19100 19200 19300 19400 19500 19600 19700 19800 19900 20000 20100 20200 20300 20400 20500 20600 20700 20800 20900 21000 21100 21200 21300 21400 21500 21600 21700 21800 21900 22000 22100 22200 22300 22400 22500 22600 22700 22800 22900 23000 23100 23200 23300 23400 23500 23600 23700 23800 23900 24000 24100 24200 24300 24400 24500 24600 24700 24800 24900 25000 25100 25200 25300 25400 25500 25600 25700 25800 25900 26000 26100 26200 26300 26400 26500 26600 26700 26800 26900 27000 27100 27200 27300 27400 27500 27600 27700 27800 27900 28000 28100 28200 28300 28400 28500 28600 28700 28800 28900 29000 29100 29200 29300 29400 29500 29600 29700 29800 29900 30000 30100 30200 30300 30400 30500 30600 30700 30800 30900 31000 31100 31200 31300 31400 31500 31600 31700 31800 31900 32000 32100 32200 32300 32400 32500 32600 32700 32800 32900 33000 33100 33200 33300 33400 33500 33600 33700 33800 33900 34000 34100 34200 34300 34400 34500 34600 34700 34800 34900 35000 35100 35200 35300 35400 35500 35600 35700 35800 35900 36000 36100 36200 36300 36400 36500 36600 36700 36800 36900 37000 37100 37200 37300 37400 37500 37600 37700 37800 37900 38000 38100 38200 38300 38400 38500 38600 38700 38800 38900 39000 39100 39200 39300 39400 39500 39600 39700 39800 39900 40000 40100 40200 40300 40400 40500 40600 40700 40800 40900 41000 41100 41200 41300 41400 41500 41600 41700 41800 41900 42000 42100 42200 42300 42400 42500 42600 42700 42800 42900 43000 43100 43200 43300 43400 43500 43600 43700 43800 43900 44000 44100 44200 44300 44400 44500 44600 44700 44800 44900 45000 45100 45200 45300 45400 45500 45600 45700 45800 45900 46000 46100 46200 46300 46400 46500 46600 46700 46800 46900 47000 47100 47200 47300 47400 47500 47600 47700 47800 47900 48000 48100 48200 48300 48400 48500 48600 48700 48800 48900 49000 49100 49200 49300 49400 49500 49600 49700 49800 49900 50000 50100 50200 50300 50400 50500 50600 50700 50800 50900 51000 51100 51200 51300 51400 51500 51600 51700 51800 51900 52000 52100 52200 52300 52400 52500 52600 52700 52800 52900 53000 53100 53200 53300 53400 53500 53600 53700 53800 53900 54000 54100 54200 54300 54400 54500 54600 54700 54800 54900 55000 55100 55200 55300 55400 55500 55600 55700 55800 55900 56000 56100 56200 56300 56400 56500 56600 56700 56800 56900 57000 57100 57200 57300 57400 57500 57600 57700 57800 57900 58000 58100 58200 58300 58400 58500 58600 58700 58800 58900 59000 59100 59200 59300 59400 59500 59600 59700 59800 59900 60000 60100 60200 60300 60400 60500 60600 60700 60800 60900 61000 61100 61200 61300 61400 61500 61600 61700 61800 61900 62000 62100 62200 62300 62400 62500 62600 62700 62800 62900 63000 63100 63200 63300 63400 63500 63600 63700 63800 63900 64000 64100 64200 64300 64400 64500 64600 64700 64800 64900 65000 65100 65200 65300 65400 65500 65600 65700 65800 65900 66000 66100 66200 66300 66400 66500 66600 66700 66800 66900 67000 67100 67200 67300 67400 67500 67600 67700 67800 67900 68000 68100 68200 68300 68400 68500 68600 68700 68800 68900 69000 69100 69200 69300 69400 69500 69600 69700 69800 69900 70000 70100 70200 70300 70400 70500 70600 70700 70800 70900 71000 71100 71200 71300 71400 71500 71600 71700 71800 71900 72000 72100 72200 72300 72400 72500 72600 72700 72800 72900 73000 73100 73200 73300 73400 73500 73600 73700 73800 73900 74000 74100 74200 74300 74400 74500 74600 74700 74800 74900 75000 75100 75200 75300 75400 75500 75600 75700 75800 75900 76000 76100 76200 76300 76400 76500 76600 76700 76800 76900 77000 77100 77200 77300 77400 77500 77600 77700 77800 77900 78000 78100 78200 78300 78400 78500 78600 78700 78800 78900 79000 79100 79200 79300 79400 79500 79600 79700 79800 79900 80000 80100 80200 80300 80400 80500 80600 80700 80800 80900 81000 81100 81200 81300 81400 81500 81600 81700 81800 81900 82000 82100 82200 82300 82400 82500 82600 82700 82800 82900 83000 83100 83200 83300 83400 83500 83600 83700 83800 83900 84000 84100 84200 84300 84400 84500 84600 84700 84800 84900 85000 85100 85200 85300 85400 85500 85600 85700 85800 85900 86000 86100 86200 86300 86400 86500 86600 86700 86800 86900 87000 87100 87200 87300 87400 87500 87600 87700 87800 87900 88000 88100 88200 88300 88400 88500 88600 88700 88800 88900 89000 89100 89200 89300 89400 89500 89600 89700 89800 89900 90000 90100 90200 90300 90400 90500 90600 90700 90800 90900 91000 91100 91200 91300 91400 91500 91600 91700 91800 91900 92000 92100 92200 92300 92400 92500 92600 92700 92800 92900 93000 93100 93200 93300 93400 93500 93600 93700 93800 93900 94000 94100 94200 94300 94400 94500 94600 94700 94800 94900 95000 95100 95200 95300 95400 95500 95600 95700 95800 95900 96000 96100 96200 96300 96400 96500 96600 96700 96800 96900 97000 97100 97200 97300 97400 97500 97600 97700 97800 97900 98000 98100 98200 98300 98400 98500 98600 98700 98800 98900 99000 99100 99200 99300 99400 99500 99600 99700 99800 99900 100000 100100 100200 100300 100400 100500 100600 100700 100800 100900 101000 101100 101200 101300 101400 101500 101600 101700 101800 101900 102000 102100 102200 102300 102400 102500 102600 102700 102800 102900 103000 103100 103200 103300 103400 103500 103600 103700 103800 103900 104000 104100 104200 104300 104400 104500 104600 104700 104800 104900 105000 105100 105200 105300 105400 105500 105600 105700 105800 105900 106000 106100 106200 106300 106400 106500 106600 106700 106800 106900 107000 107100 107200 107300 107400 107500 107600 107700 107800 107900 108000 108100 108200 108300 108400 108500 108600 108700 108800 108900 109000 109100 109200 109300 109400 109500 109600 109700 109800 109900 110000 110100 110200 110300 110400 110500 110600 110700 110800 110900 111000 111100 111200 111300 111400 111500 111600 111700 111800 111900 112000 112100 112200 112300 112400 112500 112600 112700 112800 112900 113000 113100 113200 113300 113400 113500 113600 113700 113800 113900 114000 114100 114200 114300 114400 114500 114600 114700 114800 114900 115000 115100 115200 115300 115400 115500 115600 115700 115800 115900 116000 116100 116200 116300 116400 116500 116600 116700 116800 116900 117000 117100 117200 117300 117400 117500 117600 117700 117800 117900 118000 118100 118200 118300 118400 118500 118600 118700 118800 118900 119000 119100 119200 119300 119400 119500 119600 119700 119800 119900 120000 120100 120200 120300 120400 120500 120600 120700 120800 120900 121000 121100 121200 121300 121400 121500 121600 121700 121800 121900 122000 122100 122200 122300 122400 122500 122600 122700 122800 122900 123000 123100 123200 123300 123400 123500 123600 123700 123800 123900 124000 124100 124200 124300 124400 124500 124600 124700 124800 124900 125000 125100 125200 125300 125400 125500 125600 125700 125800 125900 126000 126100 126200 126300 126400 126500 126600 126700 126800 126900 127000 127100 127200 127300 127400 127500 127600 127700 127800 127900 128000 128100 128200 128300 128400 128500 128600 128700 128800 128900 129000 129100 129200 129300 129400 129500 129600 129700 129800 129900 130000 130100 130200 130300 130400 130500 130600 130700 130800 130900 131000 131100 131200 131300 131400 131500 131600 131700 131800 131900 132000 132100 132200 132300 132400 132500 132600 132700 132800 132900 133000 133100 133200 133300 133400 133500 133600 133700 133800 133900 134000 134100 134200 134300 134400 134500 134600 134700 134800 134900 135000 135100 135200 135300 135400 135500 135600 135700 135800 135900 136000 136100 136200 136300 136400 136500 136600 136700 136800 136900 137000 137100 137200 137300 137400 137500 137600 137700 137800 137900 138000 138100 138200 138300 138400 138500 138600 138700 138800 138900 139000 139100 139200 139300 139400 139500 139600 139700 139800 139900 140000 140100 140200 140300 140400 140500 140600 140700 140800 140900 141000 141100 141200 141300 141400 141500 141600 141700 141800 141900 142000 142100 142200 142300 142400 142500 142600 142700 142800 142900 143000 143100 143200 143300 143400 143500 143600 143700 143800 143900 144000 144100 144200 144300 144400 144500 144600 144700 144800 144900 145000 145100 145200 145300 145400 145500 145600 145700 145800 145900 146000 146100 146200 146300 146400 146500 146600 146700 146800 146900 147000 147100 147200 147300 147400 147500 147600 147700 147800 147900 148000 148100 148200 148300 148400 148500 148600 148700 148800 148900 149000 149100 149200 149300 149400 149500 149600 149700 149800 149900 150000 150100 150200 150300 150400 150500 150600 150700 150800 150900 151000 151100 151200 151300 151400 151500 151600 151700 151800 151900 152000 152100 152200 152300 152400 152500 152600 152700 152800 152900 153000 153100 153200 153300 153400 153500 153600 153700 153800 153900 154000 154100 154200 154300 154400 154500 154600 154700 154800 154900 155000 155100 155200 155300 155400 155500 155600 155700 155800 155900 156000 156100 156200 156300 156400 156500 156600 156700 156800 156900 157000 157100 157200 157300 157400 157500 157600 157700 157800 157900 158000 158100 158200 158300 158400 158500 158600 158700 158800 158900 159000 159100 159200 159300 159400 159500 159600 159700 159800 159900 160000 160100 160200 160300 160400 160500 160600 160700 160800 160900 161000 161100 161200 161300 161400 161500 161600 161700 161800 161900 162000 162100 162200 162300 162400 162500 162600 162700 162800 162900 163000 163100 163200 163300 163400 163500 163600 163700 163800 163900 164000 164100 164200 164300 164400 164500 164600 164700 164800 164900 165000 165100 165200 165300 165400 165500 165600 165700 165800 165900 166000 166100 166200 166300 166400 166500 166600 166700 166800 166900 167000 167100 167200 167300 167400 167500 167600 167700 167800 167900 168000 168100 168200 168300 168400 168500 168600 168700 168800 168900 169000 169100 169200 169300 169400 169500 169600 169700 169800 169900 170000 170100 170200 170300 170400 170500 170600 170700 170800 170900 171000 171100 171200 171300 171400 171500 171600 171700 171800 171900 172000 172100 172200 172300 172400 172500 172600 172700 172800 172900 173000 173100 173200 173300 173400 173500 173600 173700 173800 173900 174000 174100 174200 174300 174400 174500 174600 174700 174800 174900 175000 175100 175200 175300 175400 175500 175600 175700 175800 175900 176000 176100 176200 176300 176400 176500 176600 176700 176800 176900 177000 177100 177200 177300 177400 177500 177600 177700 177800 177900 178000 178100 178200 178300 178400 178500 178600 178700 178800 178900 179000 179100 179200 179300 179400 179500 179600 179700 179800 179900 180000 180100 180200 180300 180400 180500 180600 180700 180800 180900 181000 181100 181200 181300 181400 181500 181600 181700 181800 181900 182000 182100 182200 182300 182400 182500 182600 182700 182800 182900 183000 183100 183200 183300 183400 183500 183600 183700 183800 183900 184000 184100 184200 184300 184400 184500 184600 184700 184800 184900 185000 185100 185200 185300 185400 185500 185600 185700 185800 185900 186000 186100 186200 186300 186400 186500 186600 186700 186800 186900 187000 187100 187200 187300 187400 187500 187600 187700 187800 187900 188000 188100 188200 188300 188400 188500 188600 188700 188800 188900 189000 189100 189200 189300 189400 189500 189600 189700 189800 189900 190000 190100 190200 190300 190400 190500 190600 190700 190800 190900 191000 191100 191200 191300 191400 191500 191600 191700 191800 191900 192000 192100 192200 192300 192400 192500 192600 192700 192800 192900 193000 193100 193200 193300 193400 193500 193600 193700 193800 193900 194000 194100 194200 194300 194400 194500 194600 194700 194800 194900 195000 195100 195200 195300 195400 195500 195600 195700 195800 195900 196000 196100 196200 196300 196400 196500 196600 196700 196800 196900 197000 197100 197200 197300 197400 197500 197600 </p>			

1ST AND 2ND PAGES										3RD AND 4TH PAGES									
PROCEDURES AND PREPAREDNESS INDEX										PROCEDURES AND PREPAREDNESS INDEX									
<p>BC</p> <p><i>Asotobacter</i> in southern steppe soils of the U.S.S.R. N. N. SOKOLINA (Soviet Union and Geogr. of Soils, Dokuchaev Soil Inst., 1955, 159-169).—The occurrence of <i>Asotobacter</i> is dependent either on the salt or H<sub>2</sub>O régime in soils or on both conditions. <i>Asotobacter</i> are absent from arachnoid, thermoson, chestnut, steppe solonchaks, solon, and other soils in the absorbing complex of which Ca<sup>++</sup> or H<sup>+</sup> ions predominate over Na<sup>+</sup> or Mg<sup>++</sup> and soil salts are low. <i>Asotobacter</i> occur in meadow-steppe and solonchak soils. Soil salts are high in these and Mg<sup>++</sup> and Na<sup>+</sup> ions are present in relatively greater amounts.</p> <p>A. H.</p>										B-III-1									
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION										E-2-2									
FROM STEELMAKING										FROM STEELMAKING									
1ST AND 2ND PAGES										1ST AND 2ND PAGES									
3RD AND 4TH PAGES										3RD AND 4TH PAGES									
5TH AND 6TH PAGES										5TH AND 6TH PAGES									
7TH AND 8TH PAGES										7TH AND 8TH PAGES									
9TH AND 10TH PAGES										9TH AND 10TH PAGES									
11TH AND 12TH PAGES										11TH AND 12TH PAGES									
13TH AND 14TH PAGES										13TH AND 14TH PAGES									
15TH AND 16TH PAGES										15TH AND 16TH PAGES									
17TH AND 18TH PAGES										17TH AND 18TH PAGES									
19TH AND 20TH PAGES										19TH AND 20TH PAGES									
21ST AND 22ND PAGES										21ST AND 22ND PAGES									
23RD AND 24TH PAGES										23RD AND 24TH PAGES									
25TH AND 26TH PAGES										25TH AND 26TH PAGES									
27TH AND 28TH PAGES										27TH AND 28TH PAGES									
29TH AND 30TH PAGES										29TH AND 30TH PAGES									
31ST AND 32ND PAGES										31ST AND 32ND PAGES									
33RD AND 34TH PAGES										33RD AND 34TH PAGES									
35TH AND 36TH PAGES										35TH AND 36TH PAGES									
37TH AND 38TH PAGES										37TH AND 38TH PAGES									
39TH AND 40TH PAGES										39TH AND 40TH PAGES									
41ST AND 42ND PAGES										41ST AND 42ND PAGES									
43RD AND 44TH PAGES										43RD AND 44TH PAGES									
45TH AND 46TH PAGES										45TH AND 46TH PAGES									
47TH AND 48TH PAGES										47TH AND 48TH PAGES									
49TH AND 50TH PAGES										49TH AND 50TH PAGES									
51ST AND 52ND PAGES										51ST AND 52ND PAGES									
53RD AND 54TH PAGES										53RD AND 54TH PAGES									
55TH AND 56TH PAGES										55TH AND 56TH PAGES									
57TH AND 58TH PAGES										57TH AND 58TH PAGES									
59TH AND 60TH PAGES										59TH AND 60TH PAGES									
61ST AND 62ND PAGES										61ST AND 62ND PAGES									
63RD AND 64TH PAGES										63RD AND 64TH PAGES									
65TH AND 66TH PAGES										65TH AND 66TH PAGES									
67TH AND 68TH PAGES										67TH AND 68TH PAGES									
69TH AND 70TH PAGES										69TH AND 70TH PAGES									
71ST AND 72ND PAGES										71ST AND 72ND PAGES									
73RD AND 74TH PAGES										73RD AND 74TH PAGES									
75TH AND 76TH PAGES										75TH AND 76TH PAGES									
77TH AND 78TH PAGES										77TH AND 78TH PAGES									
79TH AND 80TH PAGES										79TH AND 80TH PAGES									
81ST AND 82ND PAGES										81ST AND 82ND PAGES									
83RD AND 84TH PAGES										83RD AND 84TH PAGES									
85TH AND 86TH PAGES										85TH AND 86TH PAGES									
87TH AND 88TH PAGES										87TH AND 88TH PAGES									
89TH AND 90TH PAGES										89TH AND 90TH PAGES									
91ST AND 92ND PAGES										91ST AND 92ND PAGES									
93RD AND 94TH PAGES										93RD AND 94TH PAGES									
95TH AND 96TH PAGES										95TH AND 96TH PAGES									
97TH AND 98TH PAGES										97TH AND 98TH PAGES									
99TH AND 100TH PAGES										99TH AND 100TH PAGES									

SUSHKINA, N. N.

USSR/Chemistry - "Aluminum Silicates  
Soil Science

Nov 1947

"Decomposition of Aluminum Silicates by Means of Soil Bacteria," L. Ye. Novoroshova, N. P. Remezov, N. N. Sushkina, Moscow State University imeni M. V. Lomonosov, 34 --

"Dok Ak Nauk" Vol LVIII, No 4

It had been assumed for a long time that soil bacteria were very active in the process of decomposing aluminum silicates as well as potash, and dolomites, with the resultant formation of soil. Authors give very general description of experiments and results obtained in their course of studies confirming the fact that soil bacteria did actually break down aluminum silicates into soil. Submitted by Academician B. B. Polynov, 20 May 1947.

PA 38T5

SUSHKINA, N. N.

Sushkina, N. N.: "Nitrogen fixation and the biological properties of nitrogen bacteria extracted from salified soils of the Lower Volga", Report No. 2, Vestnik Mosk. un-ta, 1948, No. 10, p. 95-209, - Bibliog: 16 items.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 10, 1949).

BOBOKINA, N. N.

"The Ecological-Geographical Distribution of Azotobacter in the Soils of the USSR",  
Soil Science, No. 8, pp 501-505, 1950,

SUSHEINA, N. N.

Bacteria, Nitrifying

Present day data on the ecology of Azotobacter chroococcum, review. Mikrobiologiya  
21 no. 1:96-108 Ja-F '52

Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified



SUSHKINA, N.N.; FORMOZOV, A.N., otvetstvennyy redaktor; SABLINA, T.B.,  
redaktor; ASTAR'YEVA, G.A., tekhnicheskiiy redaktor.

[Journey to Tyuleny Island; fur seals and bird rookeries]  
Puteshestvie na ostrov Tiulenii; morskoe kotiki i ptich'i  
bazary. Moskva, Izd-vo Akademii nauk SSSR, 1954. 86 p.

(MIRA 7:11)

(Tyuleny Island--Seals (Animals)) (Seals (Animals)--  
Tyuleny Island) (Tyuleny Island--Murres) (Murres--  
Tyuleny Island)

Sushkina

N. N.

✓  
AG Distribution and growth of azotobacter in podzol soils.  
N. N. Sushkina and L. A. Sergunina (M. V. Lomonosov  
State Univ., Moscow), *Mikrobiologiya* 24, 408-14(1955).—  
Virgin podzol soils in the Moscow area do not generally con-  
tain azotobacter, which appear after cultivation begins.  
Cell counts and activity range from very low in early or  
mild cultivation to very high in highly cultivated land such  
as forcing plots, with rising rate of podzolization acting  
against azotobacter development. Tabulated data show the  
viability of azotobacter after inoculation of podzol-soil soils  
in various stages of cultivation. Julian F. Smith

①

SUSHKINA-N.N.

✓ Stability of Azotobacter to salts. N. N. Sushkina (M. V. Lomonosov State Univ., Moscow). *Mikrobiologiya* 25, 35-40 (1958).—*Azotobacter* occur in salt-enriched soils and in salty virgin soils; *A. halophilum* is an example. Both salt content and the cation are influential factors in the ecology of *Azotobacter*. Thus, the tolerances for Na, Mg and Ca concn. in the growth and N fixation activities are considerably higher for *A. halophilum* than for *Azotobacter* cultures from podzols which have not been salted. Antagonism between cations sometimes permits growth and N fixation at salt concns. above the observed individual tolerances.

Julian F. Smith

SUSHKINA, N.N., professor.

Walwhals. Priroda 45 no.5:112-113 My '56.

(MLRA 9:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.  
(Arctic regions--Dolphins)

SUSHKINA, N.N.; RYZHKOVA, P.S.

On the soil microflora on the western shore of Novaya Zemlya. Dokl.  
AN SSSR 106 no.5:914-916 F '56. (MIRA 9:7)

1. Kafedra biologii pochvy Moskovskogo gosudarstvennogo universiteta  
imeni M.V.Lomonosova. Predstavlena akademikom I.V.Tyurinym.  
(Novaya Zemlya--Soil micro-organisms)

SUSHKINA, Nadezhda Nikolayevna; VARSANOF'YEVA, V.A., otvetstvennyy redaktor;  
MYER, I.L., redaktor izdatel'stva; SHEVCHENKO, G.N., tekhnicheskii  
redaktor

[Two summers in the Arctic] Dva leta v Arktike. Moskva, Izd-vo  
Akad.nauk SSSR, 1957. 175 p.  
(Arctic regions) (MIRA 10:11)

SUSHKINA, Nadezhda Nikolayevna; PROKHODTSEVA, S.Ya., red.; VILENSKAYA,  
E.N., tekhn.red.

[Among ancient monuments] U drevnikh pamiatnikov. Moskva,  
Gos.izd-vo geogr.lit-ry, 1959. 85 p. (MIRA 12:5)  
(China--Description and travel)

SUSHKINA, N., doktor biolog.nauk

Geysers. IUn.nat. no.5:21 My '60.  
(Geysers)

(MIRA 13:6)



BUSHKINA, N.

Volcanoes. Un. nat. no. 7:21-22 J1 '60.  
(Volcanoes)

(MIRA 13:8)

SUSHKINA, H.N., prof.

The Chilean catastrophe. IUn.net. no.10:26-28 0 '60.

(MIRA 14:14)

(Chile—Earthquakes)

SUSHKINA, N.N., prof.

Boiling lakes. IUn. nat. no. 12:27-28 D '60. (MIRA 14:3)  
(Kamchatka—Geysers)

SUSHKINA, Nadezhda Nikolayevna; PROKHODTSEVA, S.Ya., red.; CHERNYKH,  
M.P., mladshiy red.; KOSHELEVA, S.M., tekhn. red.

[There are volcanos, whales and ice along the path] Na puti  
vulkany, kity, l'dy. Moskva, Geografiz, 1962. 157 p.  
(MIRA 15:8)

(Kurile Islands--Description, Geography)

(Spitsbergen--Description, Geography)

(Chukchi National Area--Description, Geography)

SUSHKINA, N.

Conference on the problem of soil micro-organisms and their role  
in crop yield. Pochvovedenie no. 4:103-108 Ap '62. (MIRA 15:4)  
(Soil micro-organisms--Congresses)

SUSHKINA, N.N., prof.

From Tanganyika to Somali (to be continued). IUn. nat. no.12:  
8-9 D '62. (MIRA 16:1)  
(Tanganyika--Plants) (Tanganyika--Animals)

SUSHKINA, N.N.

Role of micro-organisms in the primary soil-forming process; a preliminary report. Vest. Mosk. un. Ser. 6: Biol., pochv. 20 no. 3: 72-75 My-Je '65. (MIRA 18:7)

1. Kafedra biologii pochv Moskovskogo universiteta.

USSR/Astronomy-Stars, Giants

SUSHKINA, YE. I.

Mar/Apr 53

"Model of Red Giant with Isothermal Core," Ye. I. Sushkina, Ivanovo State Pedagogical Inst.

Astron Zhur, Vol 30, No 2, pp 180-183

Criticizes red-giant models in American literature and presents her conception of model with isothermal core, as quite different from models with convective core. Analyzes possible evolution of red giants and their connection with the main sequence.

Received 30 Nov 52.

72 T6



USSR/Astronomy - Red Giants - Evolution  
- Stellar Evolution

SUSHKINA, Ye. I.

May/Jun 53

"Problem of the Evolution of Red Giants," Ye. I. Sushkina, Ivanovo State Pedagog Inst

Astron Zhur, Vol 30, No 3, pp 274-278

States that subject problem is to calculate a sequence of models of red giants with isothermal nucleus and to decide the possible courses of their evolution. Thanks V. S. Sorokin for proposing the subject and for his guidance and ~~also~~ A. G. Masevich for his ~~discussions~~ <sup>Comments.</sup> ~~discussions~~ <sup>Comments.</sup> ~~discussions~~

57 T. 6

SUSHKINA, Ye.I. (g. Ivanovo)

Use of a stereographic net in astronomy lessons. Fiz.v shkole  
22 no.1:58-60 Ja-F '62. (MIRA 15:3)  
(Astronomy—Study and teaching)

VASILENKO, T.; SUSHKO, A.

Against unnecessary links in the wholesale trade. Sov. torg.  
33 no.6:39-43 Je '59. (MIRA 12:8)  
(Wholesale trade)

SUSHKO, A.A.

[Functional anatomy of the uterine veins] Funktsional'naya anatomia  
vnutrigannyykh ven matki. Kiev, Gos. med. izd-vo USSR, 1956. 114 p.  
(UTERUS--BLOOD SUPPLY) (MLRA 10:4)

SUSHKO, A.A.; CHERNYSHENKO, L.V.

Silver nitrate method for studying the walls of the lymph and  
blood capillaries. Vrach:delo no.4:383-385 Ap '57. (MLRA 10:7)

1. Kafedra normal'noy anatomii (zav. - zasl.deyatel' nauki, prof.  
M.S.Spirov) Kiyevskogo meditsinskogo instituta.  
(CAPILLARIES) (SILVER NITRATE)

SUSHKO, A.A., dots.

Lymph flow in the lungs. Vrach.delo no.2:165-171 P '58. (MIRA 11:3)

1. Kafedra normal'noy anatomii (zav.-zasluzhennyi deyatel' nauki,  
prof. M.S.Spirov) Kiyevskogo meditsinskogo instituta.  
(LYMPHATICS) (LUNGS)

SPIROV, Mikhail Sergeyevich, prof.. zasluzhennyy deyatel' nauki;  
SUSHKO, A.A., red.; LOKHMATYY, Ye.G., tekhred.

[Classification of the lymph nodes of the human abdominal  
cavity] Klassifikatsiya limfaticheskikh uzlov briushnoi  
polosti cheloveka. Kiev, Gos.med.izd-vo USSR, 1959. 138 p.  
(MIRA 13:4)

(LYMPHATICS)

(ABDOMEN)

SUSHKO, A.A., dotsent (Kiyev)

Lymph circulation in the wall of the vermiform appendix.  
Vrach.delo no.3:263-267 Mr '59. (MIRA 12:6)

1. Kafedra normal'noy anatomii (zav. - zasl.deyatel' nauki,  
prof.M.S.Spirov) Kiyevskogo meditsinskogo instituta.  
(LYMPHATICS) (APPENDIX (ANATOMY))



SUSHKO, A.A., dotsent (Kiyev, ul.Krasnoarmeyskaya, d.90a, kv.53)

Lymph circulation in the gastric wall. Nov.khir.arkh. no.4:  
68-74 J1-Ag '59. (MIRA 12:11)

1. Kafedra normal'noy anatomii (zav. - zasluzhennyy deyatel'  
nauki prof.M.S.Spirov) Kiyevskogo meditsinskogo instituta.  
(LYMPH)

SUSHKO, A.A. (Kiyev, Krasnoarmeyskaya ul., d.90-A, kv.53)

Valves of the lymphatic vessels. Arkh.anat.gist. i embr. 37  
no.7:65-74 J1 '59. (MIRA 12:10)

1. Kafedra normal'noy anatomii (zav. - zasluzhennyy deyatel'  
nauki prof.M.S.Spirov) Kiyevskogo meditsinskogo instituta im.  
O.O.Bogomol'tsa.

(LYMPHATIC SYSTEM, anatomy & histology)

SUSHKO, A.A., dotsent; CHERNYSHENKO, L.V., kand.med., nauk

Lymph flow in the human pancreas. Vrach.delo no.6:603-609  
Je '60. (MIRA 13:7)

1. Kafedra normal'noy anatomii (sav. - zasl.deyatel' nauki,  
prof. M.S. Spirov) Kiyevskogo meditsinskogo instituta.  
(LYMPHATICS) (PANCREAS)

SUSHKO, A.A.

Stages in a great life. Vrach.delo no.11:23-27 N \*60. (MIRA 13:11)

1. Kiyevskiy meditsinskiy institut.  
(PIROGOV, NIKOLAI IVANOVICH, 1810-1881)